



**2014**  
**SUSPENSION FORK**  
**OIL, AIR, AND COIL CHARTS**

# RockShox Oil Volume Chart

		Drive Side				Non-Drive Side					
Fork	Model	Damper Technology	Upper Tube		Lower Leg		Spring Technology	Upper Tube		Lower Leg	
			Volume (mL)	Oil wt	Volume (mL)	Oil wt		Volume (mL)	Oil wt	Volume (mL)	Oil wt
30 Gold	TK	Turnkey	85	5	5	15	Solo Air	-		10	15
	TK 27 TK 29		105					-		3-8	15
Argyle	RCT	Motion Control	143	5	3-8	15	Solo Air	-		30	15
	RC		130		10		Coil	-		10	15
	R	Rebound					Solo Air with Volume Adjust	-		40	15
BoXXer	World Cup	Motion Control DH	230	5	10	15	Coil	-		10	15
	R2C2						Coil with Drop Stop	-		30	15
	RC	Motion Control IS	290				Coil	-		40	15
Domain	Dual Crown RC	Motion Control IS	325	5	10	15	Coil	-		40	15
	Dual Crown R	Rebound	370				Coil U-Turn Coil	-		30	15
	RC	Motion Control	200				Coil U-Turn Coil	-		40	15
	R	Rebound					Dual Position Air Solo Air	-		10	15
Lyrik	RC2L RC2DH	Mission Control Mission Control DH	184	5	10	15	Solo Air	-		10	15
	RC	Motion Control IS	187				Solo Air	-		15	0w30
	R	Rebound	213				Solo Air	-		15	0w30
Pike	RCT3	Charger	Bleed	3	5	0w30	Solo Air	-		15	0w30
	RC						Solo Air	Grease		5	15
Reba	RLT, RL	Motion Control	106	5	5	15	Solo Air	-		6	15
	RL3		111				Coil	-		10	
Recon Gold	TK TK29 RL R	Turnkey Rebound Motion Control	133	5	6	15					

# RockShox Oil Volume Chart

		Drive Side				Non-Drive Side					
Fork	Model	Damper Technology	Upper Tube		Lower Leg		Spring Technology	Upper Tube		Lower Leg	
			Volume (mL)	Oil wt	Volume (mL)	Oil wt		Volume (mL)	Oil wt	Volume (mL)	Oil wt
Recon Silver	TK	Turnkey	150	5	6	15	Solo Air	-	-	6	15
Revelation	WC XXWC XX RCT3 RLT RL	Motion Control	134	5	5	15	Coil	-	-	12	-
SID	WC 11/8 XXWC 11/8	Motion Control	98	-	5	15	Dual Position Air Solo Air	Grease	-	5	15
	WC XXWC XX RCT3 RLT RL		106	5	5	15	Solo Air	Grease	-	5	15
	RLT3 RL3		111	-	5	15	Solo Air	-	-	3-8	15
Sektor Gold	RL TK	Motion Control Turnkey	130	-	5	15	U-Turn 130	-	-	10-16	15
			120	-			U-Turn 140	-	-		
Sektor Silver	TK	Turnkey	125	-	5	15	U-Turn 150	-	-	12	15
			125	-			Solo Air	-	-		
XC 32	TK	Turnkey	150	5	6	15	Solo Air	-	-	6	15
			150	5	6	15	Coil	-	-	12	-
XC 30	TK	Turnkey	100	-	5	15	Solo Air	-	-	10	15
	TK 29		122	-			Coil	-	-		
	TK 27		123	-			Solo Air	-	-		
XC 28	80/100	Turnkey	93	-	5	15	Coil	-	-	-	-
	120		109	-			Coil	-	-		

# RockShox Air Spring Pressures

by Rider Weight

FORK	<140 LBS (<63 KG)	140-160 LBS (63-72 KG)	160-180 LBS (72-81 KG)	180-200 LBS (81-90 KG)	200-220 LBS (90-99 KG)	MAX PSI
<b>30 Gold</b> 80 mm	90-110 psi	110-125 psi	125-140 psi	140-160 psi	175+ psi	265 psi
<b>30 Gold</b> 100-120 mm	50-70 psi	70-85 psi	85-100 psi	100-120 psi	135+ psi	205 psi
<b>Argyle</b>	120-135 psi	135-150 psi	150-165 psi	165-180 psi	180+ psi	220 psi
<b>BoXXer</b>	30-45 psi	45-60 psi	60-75 psi	75-90 psi	90-105 psi	165 psi
<b>Lyrik</b>	45-55 psi	55-65 psi	65-75 psi	75-85 psi	85-95 psi	148 psi
<b>Lyrik</b> Dual Position Air	45-65 psi	65-85 psi	85-105 psi	105-125 psi	125-145 psi	248 psi
<b>Pike</b>	45-55 psi	55-65 psi	65-75 psi	75-85 psi	85-95 psi	148 psi
<b>Pike 29</b> 120-140 mm	55-65 psi	65-75 psi	75-85 psi	85-95 psi	95-105 psi	163 psi
<b>Pike</b> Dual Position Air	45-65 psi	65-85 psi	85-105 psi	105-125 psi	125-145 psi	248 psi
<b>Reba</b>	70-90 psi	90-105 psi	105-120 psi	120-135 psi	135+ psi	200 psi
<b>Recon Gold</b> 80 mm	90-110 psi	110-125 psi	125-140 psi	140-160 psi	175+ psi	265 psi
<b>Recon Gold</b> 100-120 mm	50-70 psi	70-85 psi	85-100 psi	100-120 psi	135+ psi	205 psi
<b>Recon Silver</b> 80 mm	90-110 psi	110-125 psi	125-140 psi	140-160 psi	175+ psi	265 psi
<b>Recon Silver</b> 100-120 mm	50-70 psi	70-85 psi	85-100 psi	100-120 psi	135+ psi	205 psi
<b>Revelation</b>	65-85 psi	75-100 psi	85-115 psi	95-125 psi	125+ psi	220 psi
<b>Revelation</b> Dual Position Air	<110 psi	110-125 psi	125-140 psi	140-155 psi	155-170 psi	255 psi
<b>Sektor Gold</b>	40-60 psi	60-75 psi	75-90 psi	90-105 psi	105+ psi	225 psi
<b>Sektor Silver</b>	50-70 psi	70-85 psi	85-100 psi	100-120 psi	120+ psi	200 psi
<b>SID</b>	70-90 psi	90-105 psi	105-120 psi	120-135 psi	135+ psi	200 psi
<b>XC32</b> 80 mm	90-110 psi	110-125 psi	125-140 psi	140-160 psi	175+ psi	265 psi
<b>XC32</b> 100-120 mm	50-70 psi	70-85 psi	85-100 psi	100-120 psi	135+ psi	205 psi
<b>XC30</b> 80 mm	90-110 psi	110-125 psi	125-140 psi	140-160 psi	175+ psi	265 psi
<b>XC30</b> 100-120 mm	50-70 psi	70-85 psi	85-100 psi	100-120 psi	135+ psi	205 psi

# RockShox Coil Springs

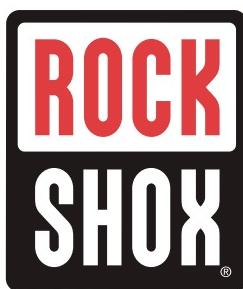
by Rider Weight

FORK	<140 LBS (<63 KG)	140-160 LBS (63-72 KG)	160-180 LBS (72-81 KG)	180-200 LBS (81-90 KG)	200-220 LBS (90-99 KG)
Argyle	Red Medium	Blue Firm	Black X-Firm	Not Available	Pink XXX-Firm
BoXXer	Silver X-Soft	Yellow Firm	Red Medium	Blue Firm	Black X-Firm
Domain					
Lyrik					
Recon Silver	Silver X-Soft	Yellow Firm	Red Medium	Blue Firm	Black X-Firm
Recon Gold					
Sektor					
XC 28 80 / 100 mm	Green X-Soft	Black Soft	Yellow Medium	Red Firm	Blue X-Firm
XC 28 120 mm	Silver X-Soft	Yellow Firm	Red Medium	Blue Firm	Black X-Firm
XC30					
XC32					

# 2013

# Revelation Service Manual

---



# SRAM LLC WARRANTY

## EXTENT OF LIMITED WARRANTY

Except as otherwise set forth herein, SRAM warrants its products to be free from defects in materials or workmanship for a period of two years after original purchase. This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the bicycle or the SRAM component was purchased. Original proof of purchase is required. Except as described herein, SRAM makes no other warranties, guarantees, or representations of any type (express or implied), and all warranties (including any implied warranties of reasonable care, merchantability, or fitness for a particular purpose) are hereby disclaimed.

## LOCAL LAW

This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state (USA), from province to province (Canada), and from country to country elsewhere in the world.

To the extent that this warranty statement is inconsistent with the local law, this warranty shall be deemed modified to be consistent with such law, under such local law, certain disclaimers and limitations of this warranty statement may apply to the customer. For example, some states in the United States of America, as well as some governments outside of the United States (including provinces in Canada) may:

- a. Preclude the disclaimers and limitations of this warranty statement from limiting the statutory rights of the consumer (e.g. United Kingdom).
- b. Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations.

## For Australian customers:

This SRAM limited warranty is provided in Australia by SRAM LLC, 133 North Kingsbury, 4th floor, Chicago, Illinois, 60642, USA. To make a warranty claim please contact the retailer from whom you purchased this SRAM product. Alternatively, you may make a claim by contacting SRAM Australia, 6 Marco Court, Rowville 3178, Australia. For valid claims SRAM will, at its option, either repair or replace your SRAM product. Any expenses incurred in making the warranty claim are your responsibility. The benefits given by this warranty are additional to other rights and remedies that you may have under laws relating to our products. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## LIMITATIONS OF LIABILITY

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event shall SRAM or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages.

## LIMITATIONS OF WARRANTY

This warranty does not apply to products that have been incorrectly installed and/or adjusted according to the respective SRAM user manual. The SRAM user manuals can be found online at [sram.com](http://sram.com), [rockshox.com](http://rockshox.com), [avidbike.com](http://avidbike.com), [truvativ.com](http://truvativ.com), or [zipp.com](http://zipp.com).

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturers specifications of usage or any other circumstances in which the product has been subjected to forces or loads beyond its design.

This warranty does not apply when the product has been modified, including, but not limited to any attempt to open or repair any electronic and electronic related components, including the motor, controller, battery packs, wiring harnesses, switches, and chargers.

This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage as a result of normal use, failure to service according to SRAM recommendations and/or riding or installation in conditions or applications other than recommended.

## Wear and tear parts are identified as:

- |   |  |                          |                      |
|---|--|--------------------------|----------------------|
| • Dust seals                                  | • Stripped threads/bolts (aluminium, titanium, magnesium or steel) | • Handlebar grips        | • Transmission gears |
| • Bushings                                    | • Brake sleeves  | • Shifter grips          | • Spokes             |
| • Air sealing o-rings                         | • Brake pads   | • Jockey wheels          | • Free hubs          |
| • Glide rings                                 | • Chains   | • Disc brake rotors      | • Aero bar pads      |
| • Rubber moving parts                         | • Sprockets  | • Wheel braking surfaces | • Corrosion          |
| • Foam rings                                  | • Cassettes  | • Bottomout pads         | • Tools              |
| • Rear shock mounting hardware and main seals | • Shifter and brake cables (inner and outer)                       | • Bearings               | • Motors             |
| • Upper tubes (stanchions)                    |  | • Bearing races          | • Batteries          |
|   |  | • Pawls                  |                      |

Notwithstanding anything else set forth herein, this warranty is limited to one year for all electronic and electronic related components including motors, controllers, battery packs, wiring harnesses, switches, and chargers. The battery pack and charger warranty does not include damage from power surges, use of improper charger, improper maintenance, or such other misuse.

This warranty shall not cover damages caused by the use of parts of different manufacturers.

This warranty shall not cover damages caused by the use of parts that are not compatible, suitable and/or authorised by SRAM for use with SRAM components.

This warranty shall not cover damages resulting from commercial (rental) use.

# TABLE OF CONTENTS

<b>REVELATION EXPLODED VIEW .....</b>	<b>4</b>
<b>ROCKSHOX SUSPENSION SERVICE.....</b>	<b>5</b>
PARTS AND TOOLS NEEDED FOR SERVICE .....	5
<b>LOWER LEG REMOVAL.....</b>	<b>6</b>
LOWER LEG SEAL SERVICE .....	8
<b>AIR SPRING SERVICE.....</b>	<b>10</b>
OPTIONAL TRAVEL CHANGE ADJUSTMENT .....	10
AIR SPRING REMOVAL .....	10
AIR SPRING INSTALLATION .....	14
<b>DAMPER SERVICE .....</b>	<b>16</b>
COMPRESSION DAMPER REMOVAL .....	16
REBOUND DAMPER SERVICE .....	19
COMPRESSION DAMPER INSTALLATION .....	22
<b>LOWER LEG INSTALLATION.....</b>	<b>24</b>
<b>PUSHLOC™ REMOTE SERVICE .....</b>	<b>27</b>
CABLE REMOVAL .....	27
CABLE INSTALLATION .....	28
<b>XLOC™ REMOTE SERVICE.....</b>	<b>30</b>
PARTS AND TOOLS NEEDED FOR SERVICE .....	30
<b>XLOC HOSE LENGTH ADJUSTMENT .....</b>	<b>30</b>
<b>XLOC™ BLEED PROCEDURE.....</b>	<b>32</b>

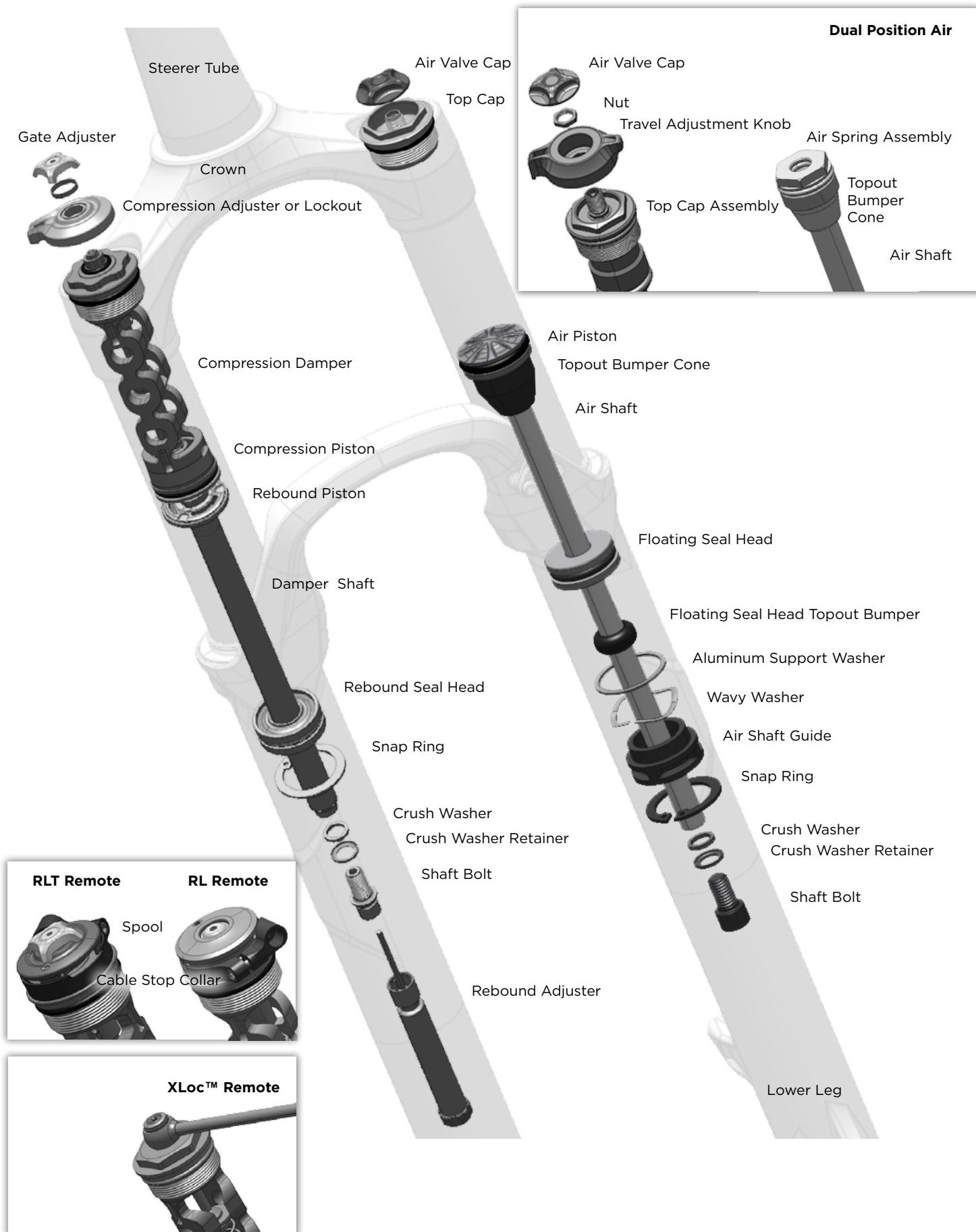


## **SAFETY FIRST!**

We care about YOU. Please, always wear your safety glasses and protective gloves when servicing RockShox products.

Protect yourself! Wear your safety gear!

## REVELATION EXPLODED VIEW



## ROCKSHOX SUSPENSION SERVICE

We recommend that you have your RockShox suspension serviced by a qualified bicycle mechanic. Servicing RockShox suspension requires knowledge of suspension components as well as the special tools and fluids used for service.

For exploded diagram and part number information, please refer to the Spare Parts Catalog available on our website at [sram.com/service](http://sram.com/service). For order information, please contact your local SRAM distributor or dealer.

Information contained in this publication is subject to change at any time without prior notice. For the latest technical information, please visit our website at [sram.com/service](http://sram.com/service).

**Your product's appearance may differ from the pictures contained in this publication.**

## PARTS AND TOOLS NEEDED FOR SERVICE

- Safety glasses
- Nitrile gloves
- Apron
- Clean, lint-free rags
- Oil pan
- Isopropyl alcohol
- RockShox 15wt suspension fluid
- RockShox 5wt suspension fluid
- Liquid O-Ring® PM600 military grease
- Buzzy's® Slick Honey bike grease
- Shock pump
- Seal installation tool
- Downhill tire lever
- Rubber mallet
- Schrader valve core tool
- 1.5, 2, 2.5, and 5 mm hex wrench
- 1.5, 2, 2.5, and 5 mm hex bit socket
- 24 mm socket
- 24 mm crowfoot
- 10 mm open end wrench
- 10 mm deep socket
- Torque wrench
- Large internal snap ring pliers
- Pick
- Long plastic or wooden dowel
- Syringe
- Optional travel change solo air spring assembly

## SAFETY INSTRUCTIONS

Always wear safety glasses and nitrile gloves when working with suspension fluid.

Place an oil pan on the floor underneath the area where you will be working on the fork.

## NOTICE

Do not scratch any sealing surfaces when servicing your suspension. Scratches can cause leaks.

When replacing o-rings, use your fingers or a pick to remove the o-ring. Clean the o-ring groove and apply grease to the new o-ring.

## LOWER LEG REMOVAL

- 1** Remove the air valve cap from the top cap located on the non-drive side fork leg.



- 2** Use a small hex wrench to depress the Schrader valve and release all of the air pressure from the air chamber.

Use a Schrader valve tool to remove the valve core from the valve body. Install a new Schrader valve.

### CAUTION - EYE HAZARD

Verify all pressure is removed from the fork before proceeding.  
Failure to do so can result in injury and/or damage to the fork.



- 3** Remove the external rebound adjuster knob by pulling it from the shaft bolt at the bottom of the drive side fork leg.



**4** Use a 5 mm hex wrench to loosen both shaft bolts 3 to 4 turns.

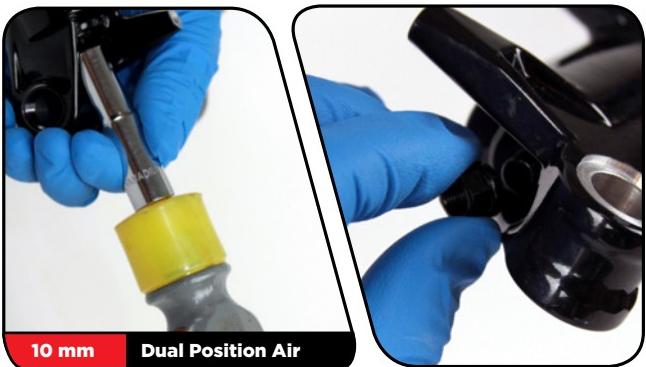
**Dual Position Air:** Use a 10 mm deep socket to loosen the nut 3 turns.



**5** Place an oil pan beneath the fork to catch any draining fluid.

Insert a 5 mm hex wrench into the one of the shaft bolts. Use a plastic mallet to firmly strike the wrench and free the bolt from the lower leg. Remove the shaft bolt from the lower leg. Repeat this procedure for the other shaft bolt.

**Dual Position Air:** Insert a 10 mm deep socket on the non-drive side shaft nut. Use a plastic mallet to firmly strike the socket and free the bolt from the lower leg. Remove the nut.

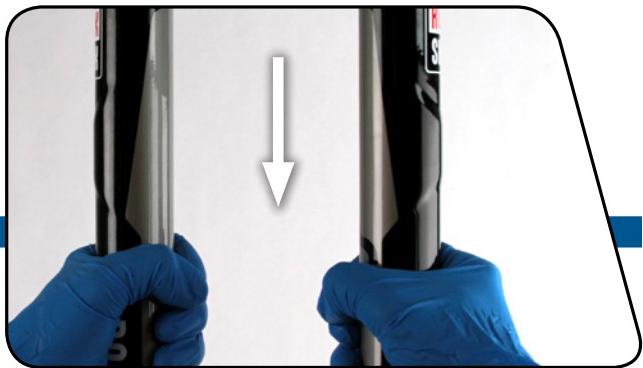


- 6** Firmly pull the lower legs downward until fluid begins to drain. Remove the lower leg from the fork by pulling it downward, holding onto both legs or the brake arch.

*If the lower legs do not slide out of the upper tubes or if fluid doesn't drain from either side, the press fit of the shaft(s) to the lower leg may still be engaged. Reinstall the shaft bolts 2 to 3 turns and repeat the previous step.*

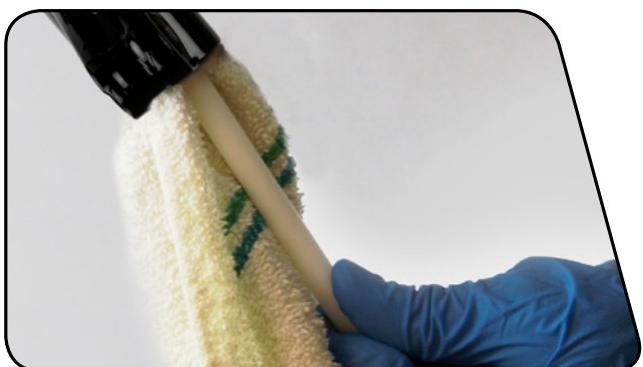
**NOTICE**

**Do not hit the brake arch with any tool when removing the lower leg as this could damage the fork.**



- 7** Spray isopropyl alcohol on the inside and outside of the lower leg. Wipe the outside of the lower leg with a rag.

Wrap a rag around a long dowel and insert it into the lower leg to clean the inside of each lower leg.



## LOWER LEG SEAL SERVICE

- 1** Place the tip of a downhill tire lever underneath the lower lip of the dust wiper seal.

**NOTICE**

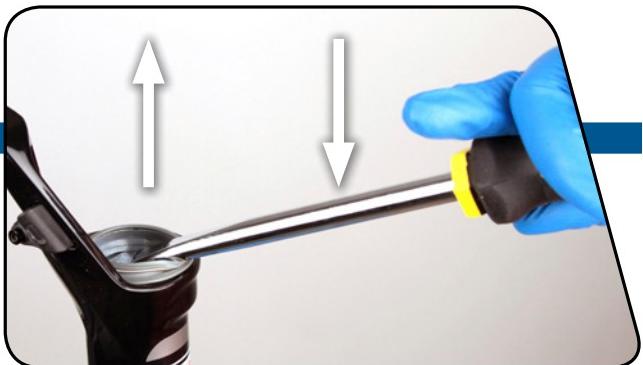
**If using a flat head screwdriver, make sure it has a round shaft. A screwdriver with a square shaft will damage the fork leg.**



- 2** Stabilize the lower legs on a bench top or on the floor. Hold the lower legs firmly and use downward force on the tool handle to leverage the dust wiper seal out. Repeat on the other side.

**NOTICE**

**Keep the lower leg assembly stable. Do not allow the lower legs to twist in opposite directions, compress toward each other, or be pulled apart. This will damage the lower leg.**



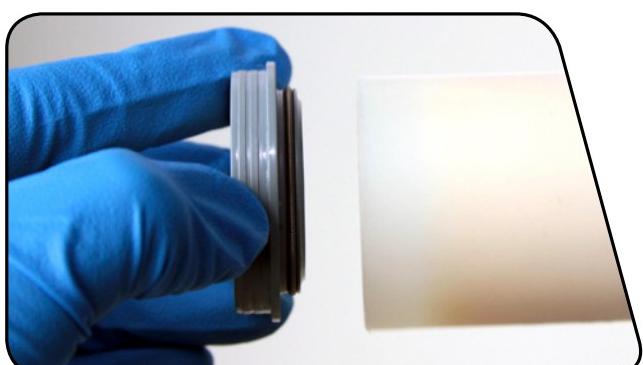
- 3** Use your fingers to remove and discard the foam rings inside the lower legs.



- 4** Soak the new foam rings in RockShox 15wt suspension fluid.  
Reinstall new foam rings on the top bushings in the lower legs.



- 5** Use a seal installation tool to install the new dust wiper seal.  
Position the dust wiper seal into the recessed side of the tool, so the grooved side of the seal is visible.



- 6** Hold one of the lower legs and use the seal installation tool to push the dust wiper seal evenly into the lower legs until there is no gap between the dust wiper seal and lower legs.



## AIR SPRING SERVICE

### OPTIONAL TRAVEL CHANGE ADJUSTMENT

To change the travel in your suspension fork, replace the entire solo air spring assembly according to the directions below. For part number information, please refer to the Spare Parts Catalog available on our website at [sram.com/service](http://sram.com/service). For ordering information, please contact your local SRAM distributor or dealer.

Desired Travel	Required Solo Air Spring Assembly Length
110	182.2
120	192.5
130	202.2
140	212.2
150	222.2

### AIR SPRING REMOVAL

- 1 Use a small hex wrench to depress the Schrader valve and release all of the air pressure from the air chamber.

#### CAUTION- EYE HAZARD

Verify all pressure is removed from the fork before proceeding. Failure to do so can result in injury and/or damage to the fork.



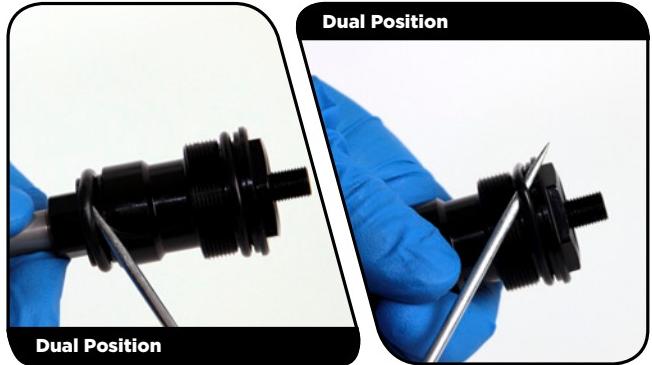
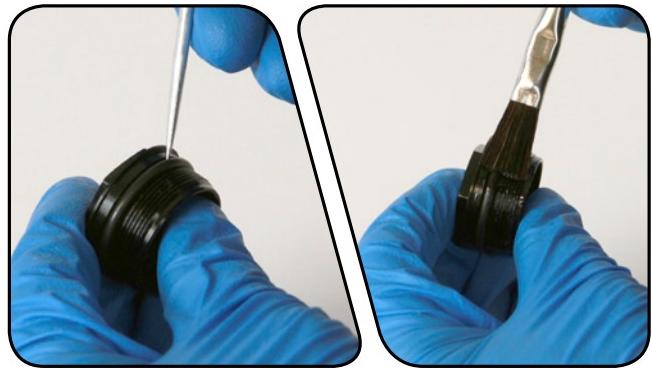
- 2 Use a 24 mm socket wrench to remove the air spring top cap. Once removed, clean the upper tube threads with a rag.

**Dual Position Air:** Use a 10 mm socket to remove the top cap nut. Remove the travel adjustment knob. Use a 24 mm socket wrench to remove the top cap assembly.



- 3** Use a pick to remove the top cap o-ring(s). Apply a small amount of grease to a new top cap o-ring(s) and install on the top cap. Apply a small amount of grease to the top cap threads.

**Do not scratch the top cap. Scratches can cause leaks.**



- 4** Use a pick to remove and replace the air valve cap o-ring.

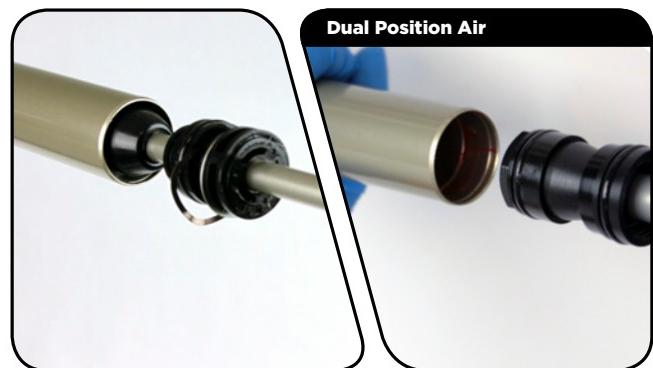


- 5** Place the tips of large internal snap ring pliers into eyelets of the snap ring, located at the bottom of the non-drive side upper tube. Press firmly on the pliers to push the air shaft guide into the upper tube enough to compress and remove the snap ring.

**Guide the snap ring over the air shaft to prevent scratching. Scratches on the air shaft will allow air to bypass the seal head into the lower leg, resulting in reduced spring performance.**



- 6** Firmly pull on the air shaft to remove the air shaft assembly from the upper tube. Clean and inspect the assembly for damage.



- 7** Spray isopropyl alcohol on the inside and outside of the upper tube. Wipe the outside of the upper tube with a rag.

Wrap a rag around a long dowel and insert it into the upper tube to clean inside the upper tube.



**8** Remove the floating seal head, washers, topout bumper, and air shaft guide from the air shaft.

Spray isopropyl alcohol on the air shaft and clean it with a rag.

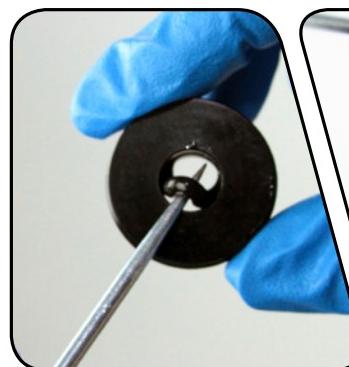


**9** Use a pick to remove the inner and outer floating seal head o-rings.

Inspect the seal head for scratches. Spray isopropyl alcohol on the seal head and clean it with a rag.

Apply a liberal amount of grease to the new o-rings and install them.

**Do not scratch the floating seal head. Scratches can cause leaks.**

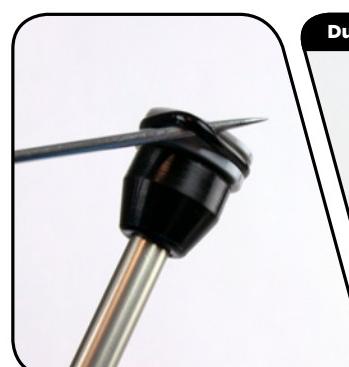


**10** Use a pick to remove the air piston outer o-ring.

Inspect the air piston for scratches. Spray isopropyl alcohol on the air piston and clean it with a rag.

Apply a liberal amount of grease to the new o-ring and install it.

**Do not scratch the air piston. Scratches can cause leaks.**

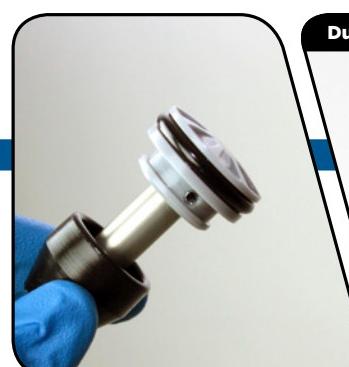


**11** Use your fingers to remove the topout bumper cone from the air shaft.

Install a new topout bumper cone onto the air shaft so it covers the tension pin hole or vent hole (Dual Position Air).

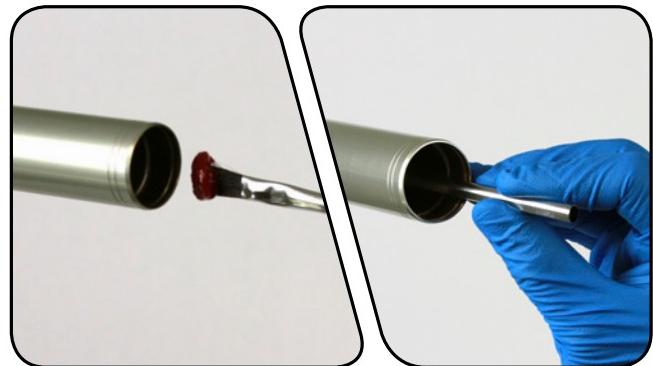
#### NOTICE

If the pin tension is protruding or not centered, replace the piston assembly.



## AIR SPRING INSTALLATION

- 1** Apply a liberal amount of grease to the inside of the upper tube, from the end of the tube to approximately 60 mm into the tube.



- 2** Apply a liberal amount of grease to the air piston.



- 3** Apply a liberal amount of grease 40-60 mm around the air shaft.

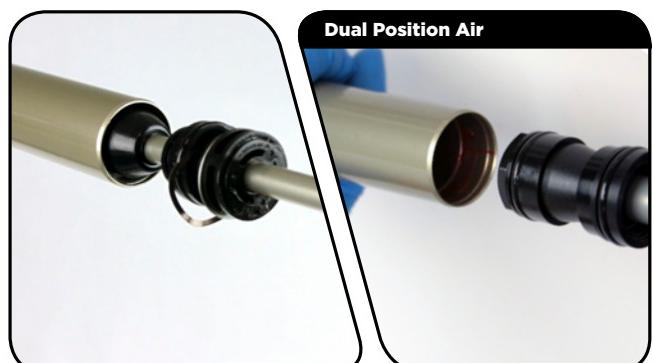
Install the floating seal head, a new floating seal head topout bumper, new aluminum support washer, new wavy washer and the air shaft guide, in that order, onto the air shaft.

**Dual Position Air:** Install the seal head on the air shaft.



- 4** Firmly push the air shaft assembly into the bottom of the upper tube while gently rocking the air shaft side to side.

Orient the washers so that the aluminum support washer goes into the upper tube first, followed by the wavy washer.



- 5** Install the snap ring onto internal snap ring pliers. Use the pliers to push the air shaft into the upper tube while installing the snap ring into its groove. The air shaft guide should be situated between the snap ring eyelets.

**Make sure the snap ring is securely fastened in the snap ring groove. Check this by using the snap ring pliers to rotate the snap ring back and forth a couple of times, then firmly pulling down on the air shaft.**

*Snap rings have a sharper-edged side and a rounder-edged side. Installing snap rings with the sharper-edged side facing the tool will allow for easier installation and removal.*



- 6** Insert the top cap into the top of the upper tube. Use a torque wrench with a 24 mm socket to tighten the top cap to 7.3 N·m (65 in-lb).

**Dual Position Air:** Install the travel adjustment knob on the top cap. Use a 10 mm socket to tighten the top cap nut. Remove the travel adjustment knob.



## DAMPER SERVICE

### COMPRESSION DAMPER REMOVAL

- 1 RCT3:** Use a 1.5 mm hex wrench to remove the low speed compression set screw. Use a 10 mm open end wrench to remove the nut. Remove the low speed compression knob and compression adjuster knob.



- RLT:** Use a 1.5 mm hex wrench to remove the flood gate set screw. Use your fingers to remove the PTFE seal. Remove the flood gate, compression adjuster knob, and the o-ring on the cam.



- RL:** Use a 2.5 mm hex wrench to remove the compression adjuster knob retention screw. Remove the compression adjuster knob.



- XLoc™ Remote:** Use a 24 mm open end wrench to loosen and remove the top cap.



- 2** **Remote Only:** Remove the cable from the cable stop collar. Use a 2 mm hex wrench to loosen the cable stop collar clamping bolt. Remove the cable stop collar.



2 mm

- 3** Use a 24 mm socket to loosen the compression damper top cap. Remove the compression damper by pulling up and gently rocking side to side. Clean the upper tube threads with a rag.



24 mm



- 4** Use a pick or your fingers to remove the compression damper top cap o-ring. Apply grease to the new o-ring and install it.

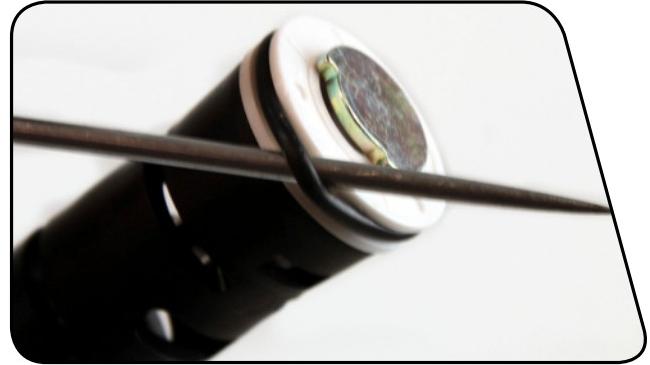
**Do not scratch the top cap. Scratches can cause leaks.**



- 5** Use a pick or your fingers to remove the compression damper piston o-ring. Apply suspension fluid to the new o-ring and install it.

**RCT3 Only:** Install a new glide ring on the compression damper piston.

**Do not scratch the piston. Scratches can cause leaks.**



- 6** Remove the fork from the bicycle stand and pour the suspension fluid into an oil pan.

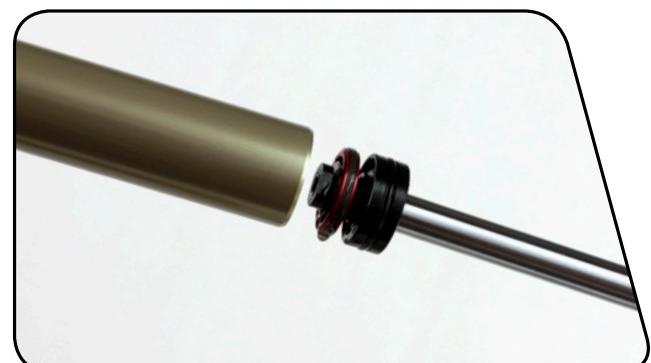


## REBOUND DAMPER SERVICE

- 1** Clamp the fork into the bicycle stand. From the bottom of the upper tube, push the rebound shaft in until enough shaft is exposed to hold onto with your fingers.  
Use internal snap ring pliers to remove the rebound damper seal head snap ring.



- 2** Remove the rebound damper and seal head assembly from the upper tube.



- 3** Spray isopropyl alcohol on the inside and outside of the upper tube. Wipe the outside of the upper tube with a rag.  
Wrap a rag around a long dowel and insert it into the upper tube to clean inside the upper tube.



- 4** Install a new piston glide ring on the rebound damper.



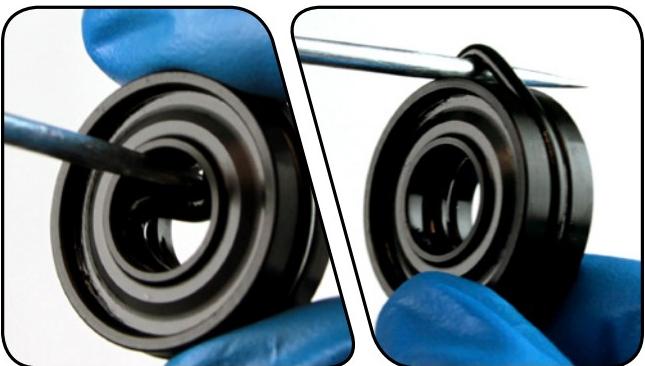
**5** Remove the rebound seal head from the damper shaft.

Use a pick to remove the inner and outer rebound seal head o-rings. Inspect the rebound seal head for scratches and wipe it with a rag.

Apply suspension fluid to the new o-rings and install.

Spray isopropyl alcohol on the rebound damper shaft and clean it with a rag.

**Do not scratch the seal head. Scratches can cause leaks.**



**6** Spray isopropyl alcohol on the rebound damper shaft and clean it with a rag.

Install the rebound seal head onto the shaft.



**7** Insert the rebound damper piston into the bottom of the upper tube at an angle with the side opposite the glide ring split entering first. Continue to angle and rotate until the glide ring is in the upper tube.



- 8** Push the rebound seal head firmly into the upper tube until the retaining ring groove is visible.

Push the rebound damper shaft into the seal head, until enough shaft is exposed to hold onto with your fingers.



- 9** Use internal snap ring pliers to secure the snap ring into the retaining ring groove.

**Make sure the snap ring is securely fastened in the snap ring groove. Check this by using the snap ring pliers to rotate the snap ring back and forth a couple of times, then firmly pulling down on the air shaft.**

*Snap rings have a sharper-edged side and a rounder-edged side. Installing snap rings with the sharper-edged side facing the tool will allow for easier installation and removal.*



- 10** Clamp the fork vertically in the bicycle stand. Pull the rebound damper shaft down to the fully extended position.

Measure and pour 134 mL of RockShox 5wt suspension fluid to into the drive side upper tube.

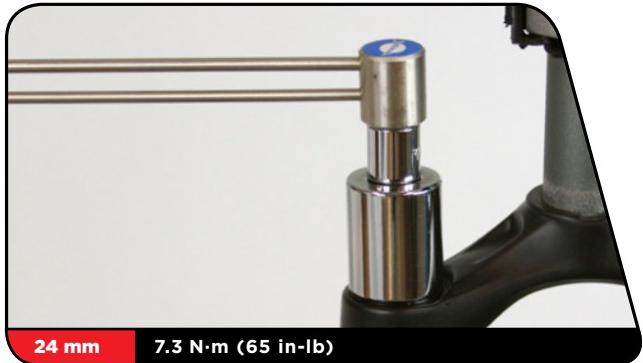
*Suspension fluid volume is critical. Too much suspension fluid reduces available travel, too little suspension fluid decreases damping performance.*



- 11** Turn the hex shaft to the unlocked position. Insert the compression damper into the upper tube. Press down and rock side to side until the damper is installed.



- 12** Use a torque wrench with a 24 mm socket to tighten the compression damper to 7.3 N·m (65 in-lb).



24 mm      7.3 N·m (65 in-lb)

**XLoc Remote:** Use a torque wrench with a 24 mm crowfoot to tighten the compression damper to 7.3 N·m (65 in-lb).

**Install the crowfoot onto the torque wrench at a 90° angle to the handle to ensure an accurate torque reading.**



24 mm      7.3 N·m (65 in-lb)

## COMPRESSION DAMPER INSTALLATION

- 1** **Remote Only:** Install the cable stop collar onto the top cap with the cable stop facing toward the front of the fork, perpendicular to the crown.

Use a 2 mm hex wrench to tighten the collar clamp bolt to 1.4 N·m (12 in-lb).



2 mm      1.4 N·m (12 in-lb)

**2 RCT3:** Install the compression adjuster knob so the dial is against the hard stop. Use a 10 mm open end wrench to tighten the washer bolt.

Use a torque wrench with a 1.5 mm hex bit socket to tighten the low speed compression set screw to 0.6 N·m (5 in-lb).



**RLT:** Install a new o-ring on the cam, then install the compression adjuster knob so the knob dial is against the hard stop. Use your fingers to install a new PTFE seal in the groove on the compression adjuster knob.

**RLT Remote:** Install a new PTFE seal around the cam, then install the compression adjuster knob so the knob dial is against the hard stop. Use your fingers to install a new PTFE seal in the groove on the compression adjuster knob. Use a torque wrench with a 2 mm hex bit socket to tighten the cable stop collar bolt to 1.4 N·m (12 in-lb).

Use a torque wrench with a 1.5 mm hex bit socket to tighten the flood gate set screw to 0.6 N·m (5 in-lb).



**RL:** Install the compression adjuster knob with the knob dial against the hard stop.

Use a torque wrench with a 2.5 mm hex bit socket to install the compression adjuster knob retention screw to 1.4 N·m (12 in-lb).



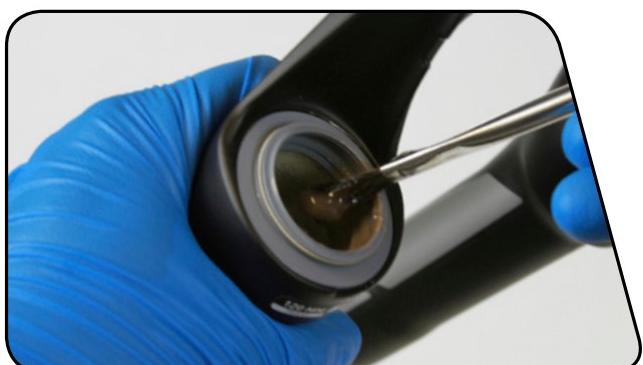
## LOWER LEG INSTALLATION

- 1** Spray isopropyl alcohol on the upper tubes and clean them with a rag.



- 2** Apply a liberal amount of Buzzy's® Slick Honey bike grease to the inner surfaces of the dust wiper seals.

*Dust wipers may already be pregreased from the factory. If that is the case, do not apply more grease.*



- 3** Slide the lower leg assembly onto the upper tube assembly just enough to engage the upper bushing with the upper tubes.

**Make sure both dust wiper seals slide onto the tubes without folding the outer lip of either seal.**



- 4** Position the fork at a slight angle with the shaft bolt holes oriented upward, then inject 5 mL of RockShox 15wt suspension fluid into each lower leg through the shaft bolt hole.



- 5** Slide the lower leg assembly along the upper tubes until it stops and the spring and damper shafts are visible through the shaft bolt holes. Wipe all excess fluid from the outer surface of the lower legs.



- 6** Install a new o-ring into the top gland of a new shaft bolt. Install a new spring clip in the lower gland of the shaft bolt.

Apply a thick layer of grease around the diameter of the bolt head and o-ring.

Replace the crush washers and crush washer retainers.

**Dirty or damaged crush washers can cause leaks.**



- 7** Insert the shaft bolts into the lower legs through the threaded shaft bolt holes.

Use a torque wrench with a 5 mm hex bit socket to tighten the bolts to 7.3 N·m (65 in-lb).



- 8** Insert the external rebound damper knob into the rebound damper shaft bolt until it is secure. Adjust the rebound.



- 9** Refer to the air chart on the fork lower leg and pressurize the air spring to the appropriate pressure for your rider weight.

*You may see a drop in the indicated air pressure on the pump gage while filling the air spring, this is normal. Continue to fill the air spring to the recommended air pressure.*



- 10** Spray isopropyl alcohol on the entire fork and clean it with a rag.

## PUSHLOC™ REMOTE SERVICE

### CABLE REMOVAL

- 1** Push the remote lever until it returns toward you.



- 2** **RLT and RL:** Use a 2 mm hex wrench to loosen the cable pinch bolt on the spool and pull the cable out of the cable end slot. Use pliers to remove the cable end.



- 3** Disconnect the cable from the damper and pull the cable housing off the cable.



- 4** Use a 2 mm hex wrench to open the cable hatch cover. Push the cable through the remote until the cable head is far enough out of the lever to access.



- 5** Pull the cable head to remove the cable from the remote system.

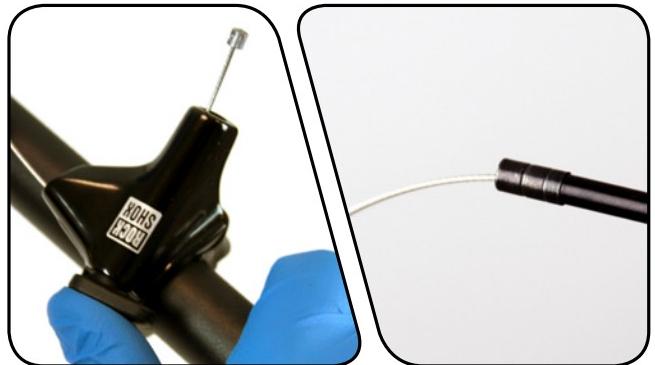


## CABLE INSTALLATION

- 1** If replacing the cable housing, detach the cable housing and end caps from the lever and the cable housing stop on the fork.

Attach the new housing and end caps to the remote lever and the cable housing stop on the fork. Cut a length of shifter housing to accommodate travel and suspension movement.

- 2** Hold the remote lever in and install the new shifter cable through remote. Install the cable housing onto the new shifter cable.



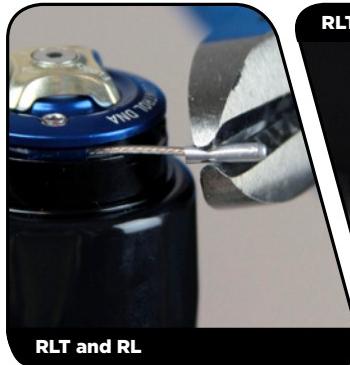
- 3** Pull the cable until the cable head is seated in the remote lever.

With the cable head seated in the remote lever, close the cable hatch cover and push the lever to return it to the unlocked position.



- 4 RLT and RL:** Wrap the cable around the spool and insert it through the cable fixing port. While firmly pulling the cable, use a torque wrench with a 2 mm hex bit socket to tighten the cable pinch bolt to 0.9 N·m (8 in-lb).

Cut the excess cable, leaving 30 mm protruding from the cable fixing port. Install a cable end fitting and tuck the cable end into the slot in the spool.



**NOTICE**

The XLoc damper remote lockout uses a specific hydraulic hose that is compatible with the system's suspension fluid. Use only XLoc compatible hydraulic brake hose, Reverb high performance hydraulic fluid, and the RockShox Speed Lube Kit. Failure to do so will damage the system.

**PARTS AND TOOLS NEEDED FOR SERVICE**

- Safety glasses
- Nitrile gloves
- Apron
- Clean, lint-free gloves
- Oil pan
- Isopropyl alcohol
- Replacement XLoc hydraulic hose
- Hydraulic hose cutter or cable housing cutter
- Utility knife
- Torque wrench
- Reverb high performance hydraulic fluid
- RockShox Speed Lube kit
- T25, T10 TORX® bit sockets
- T25, T10 TORX wrenches

**XLOC HOSE LENGTH ADJUSTMENT**

- 1 To reduce the hydraulic hose length:** Use a utility knife to cut a 1 cm slit in the hydraulic hose across the top of the hose barb at the XLoc remote.

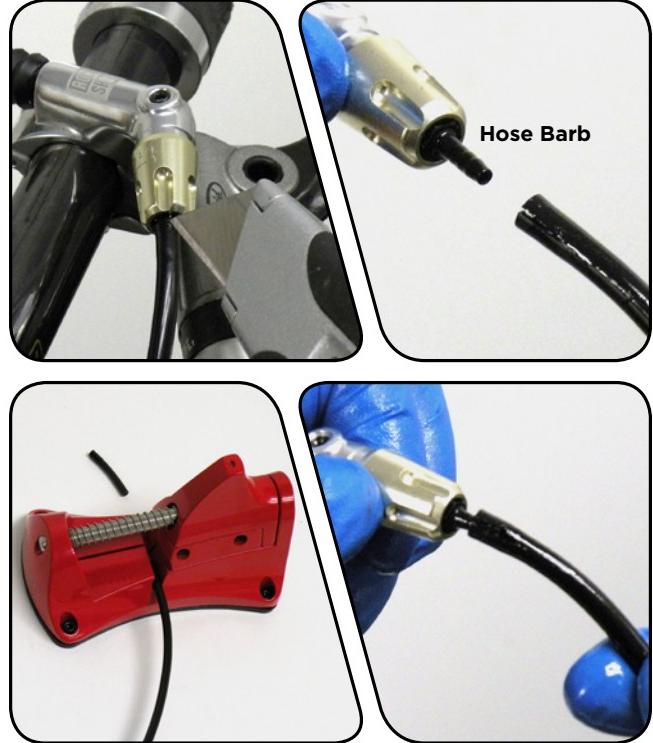
Pull the cut end of the hydraulic hose from the hose barb.

Use a hydraulic hose cutter or sharp cable housing cutter to cut the hydraulic hose to the desired length.

Firmly press the hydraulic hose back onto the hose barb until the hose bottoms out.

Bleed your XLoc according to the [XLoc bleed procedure](#).

**Do not scratch the hose barb.**



**2 To increase the hydraulic hose length:** Use a utility knife to cut a slit in the hydraulic hose across the top of the hose barb at the fork crown and the hose barb at the XLoc™.

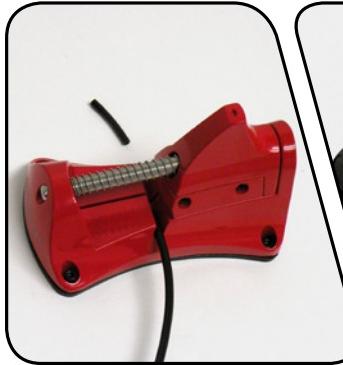
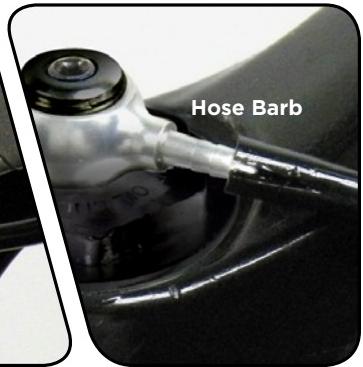
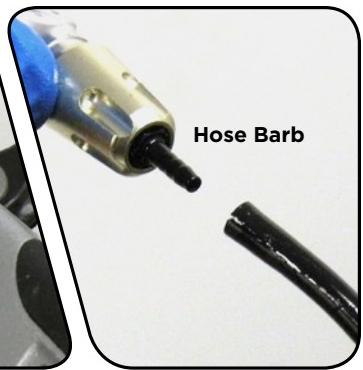
Pull the hydraulic hose from the hose barbs and discard it.

Use a hydraulic hose cutter or sharp cable housing cutter to cut the new hydraulic hose to the desired length.

Firmly press the new hydraulic hose back onto both hose barbs until the hose bottoms out.

Bleed your XLoc according to the [XLoc bleed procedure](#).

**Do not scratch the hose barb.**

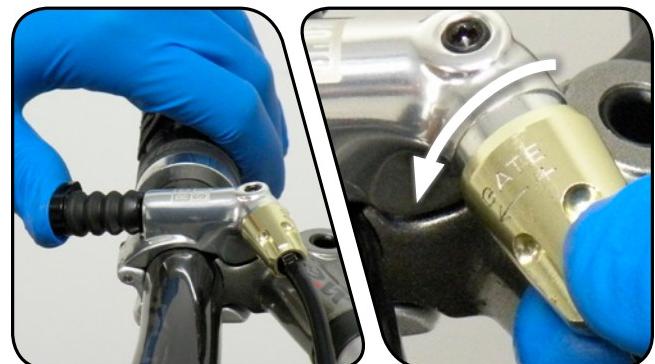


## XLOC™ BLEED PROCEDURE

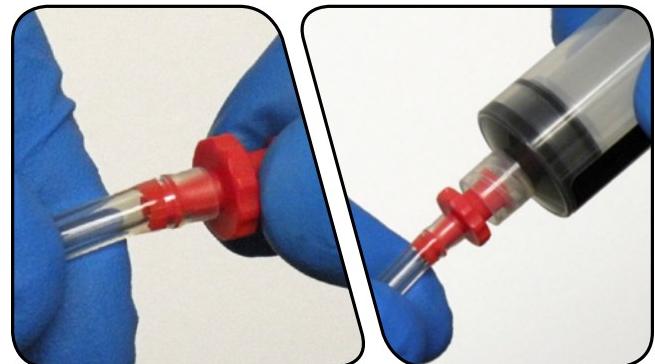
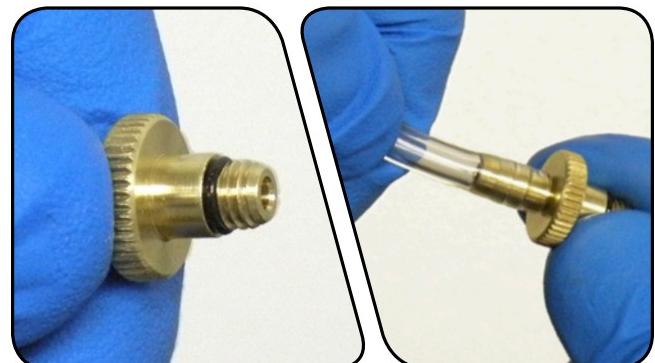
- 1** Use a T25 TORX® wrench to loosen the shifter mounting bolt and remove the shifter.



- 2** Use a T25 TORX wrench to loosen the XLoc handlebar clamp, position the XLoc so that the bleed screw is slightly above the button, and retighten the clamp bolt.



- 3** Push the remote lever until it returns toward you in the unlocked (compressed) position. Turn the gold floodgate adjuster in the direction of the arrow until it stops (maximum floodgate).  
**4** Assemble two RockShox Speed Lube kit syringes. Install an o-ring onto the end of the brass fitting. Insert the brass fitting into the plastic tube. Insert the red fitting into the other end of the plastic tube. Thread the red fitting into the syringe.



- 5** Use a T10 TORX® to remove the bleed screw from the top of the damper, located at the fork crown.



- 6** Fill both Speed Lube syringes with 10 mL of Reverb high performance hydraulic fluid.



- 7** Thread the brass fitting of a Speed Lube syringe into the damper bleed port.



- 8** Gently push in the syringe plunger to fill the system with suspension fluid.

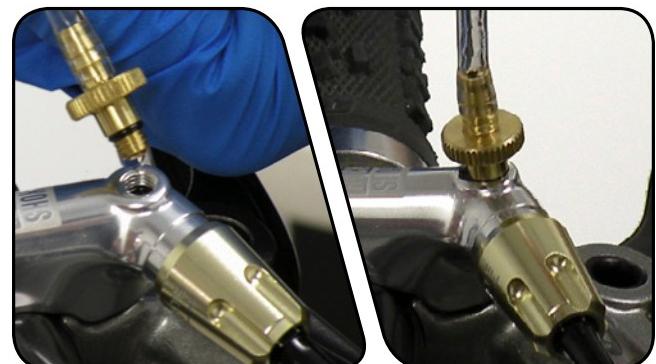
Reverse this process by gently pulling out on the syringe plunger. Repeat these steps a few times to ensure the system is fully filled with suspension fluid.



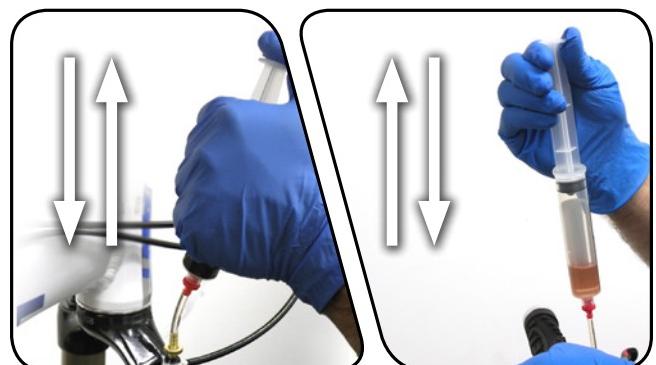
- 9** Use a T10 TORX® wrench to remove the bleed screw from the XLoc™.



- 10** Apply a few drops of hydraulic fluid to the XLoc bleed port, and then thread the brass fitting of the other Speed Lube kit into the bleed port.



- 11** Hold both syringes upright and depress the plunger of the damper syringe while simultaneously pulling out on the plunger of the remote syringe. Reverse this process and repeat until no more bubbles move into the remote syringe.



- 12** Remove the syringe from the damper, and use a T10 TORX wrench to reinstall the bleed screw into the damper. Use a rag to clean off any excess hydraulic fluid.



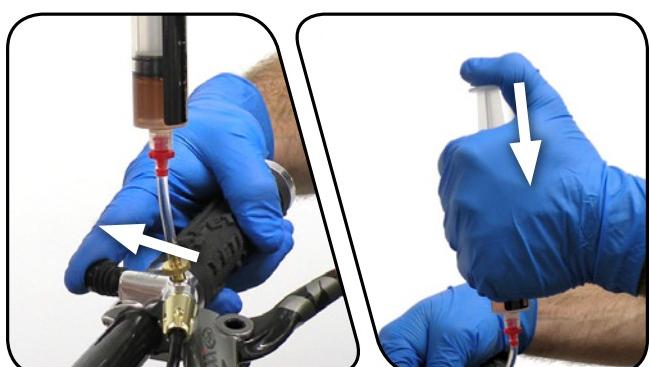
- 13** Push the remote lever until the XLoc™ button is in the locked (extended) position and pull out the syringe plunger. Small bubbles will move into the hydraulic fluid as air is pulled from the system.



- 14** Continue pulling out on the Speed Lube syringe plunger. Push in the remote lever to the unlocked (compressed) position. This will dislodge more bubbles from the remote into the syringe.



- 15** Push in on the syringe plunger, and then push the remote lever until the XLoc button is in the locked (extended) position.



- 16** Repeat steps 13-15 until air bubbles no longer move into the hydraulic fluid. It can take several repetitions of this process to fully void the system of air.

- 17** Remove the Speed Lube fitting from the XLoc™ bleed port. Put a few drops of hydraulic fluid into the bleed port. Replace the bleed port screw and use a torque wrench with a T10 TORX® bit socket to tighten to 0.5-0.7 N·m (4-6 in-lb).

Use a rag to clean off any excess hydraulic fluid.



- 18** Use a T25 TORX wrench to loosen the XLoc handlebar clamp. Reposition the XLoc to your desired angle. Use a torque wrench with a T25 TORX bit socket to tighten the XLoc clamp bolt to 5-6 N·m (44-53 in-lb).



- 19** Attach the XLoc shifter to the XLoc bracket with the shifter mounting bolt. Use a torque wrench with a T25 TORX bit socket to tighten the shifter mounting bolt to 2.8-3.4 N·m (25-30 in-lb).



**This concludes the service for RockShox Revelation front suspension forks.**

[www.sram.com](http://www.sram.com)